

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-3. (Canceled)

4. (New) A method for identifying a primary cell under Site Selective Diversity Transmit comprising the steps of:

assigning a temporary identifier by a network system to each cell;

transmitting an identifier indicating the primary cell periodically by a mobile station to connected cells via up link feedback indication fields; and

receiving, by the base station, the identifier indicating the primary cell transmitted by the mobile station, if signals received by the base station satisfy with one of following conditions, then the base station considers itself as the primary cell, and wherein the conditions are:

A) an identifier code word indicating the primary cell received by the base station is matched with the identifier code word of itself;

B) quality of up link signals received by the base station does not satisfy with a quality threshold, wherein the quality threshold is a parameter defined by the network system;

C) bits of dropping of the identifier code word caused by using an up link compression mode excess a value, wherein the value is a maximum integer not larger than $1/3$ length of the identifier code word; and

wherein in the condition B), the identifier code word indicating the primary cell received by the base station has a certain matching degree with an ID code word of the cell itself.

5. (New) The method of claim 4, wherein the matching degree in condition B) is a matching degree P of the identifier code word indicating the primary cell received by the base station and the ID code of the cell is larger than a threshold Plr.

6. (New) The method of claim 5, wherein the threshold Plr in condition (B) is set by a higher system layer.